



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**  
REGION II  
245 PEACHTREE CENTER AVENUE NE, SUITE 1200  
ATLANTA, GEORGIA 30303-1257

May 13, 2011

Mr. Mano Nazar  
Executive Vice President  
Nuclear and Chief Nuclear Officer  
Florida Power and Light Company  
P.O. Box 14000  
Juno Beach, FL 33408-0420

SUBJECT: ST. LUCIE NUCLEAR PLANT – NRC TEMPORARY INSTRUCTION 2515/183  
INSPECTION REPORT 05000335/2011009, 05000389/2011009

Dear Mr. Nazar:

On April 29, 2011, the U.S. Nuclear Regulatory Commission (NRC) completed an inspection at your St. Lucie Plant using Temporary Instruction 2515/183, "Followup to the Fukushima Daiichi Nuclear Station Fuel Damage Event." The enclosed inspection report documents the inspection results which were discussed on May 6, 2011, with Mr. Anderson and other members of your staff.

The objective of this inspection was to promptly assess the capabilities of St. Lucie to respond to extraordinary consequences similar to those that have recently occurred at the Japanese Fukushima Daiichi Nuclear Station. The results from this inspection, along with the results from this inspection performed at other operating commercial nuclear plants in the United States, will be used to evaluate the U.S. nuclear industry's readiness to safely respond to similar events. These results will also help the NRC to determine if additional regulatory actions are warranted.

All of the potential issues and observations identified by this inspection are contained in this report. The NRC's Reactor Oversight Process will further evaluate any issues to determine if they are regulatory findings or violations. Any resulting findings or violations will be documented by the NRC in a separate report. You are not required to respond to this letter.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of

NRC's document system (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

***/RA/***

Daniel W. Rich, Chief  
Reactor Projects Branch 3  
Division of Reactor Projects

Docket Nos. 50-335, 50-389  
License Nos. DPR-67, NPF-16

Enclosure: Inspection Report 05000335/2011009, 05000389/2011009

cc w/encl: (See page 3)

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DATE	05/11/2011	05/11/2011	05/10/2011	05/11/2011			
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Letter to Mano Nazar from Daniel W. Rich dated May 13, 2011

SUBJECT: ST. LUCIE NUCLEAR PLANT – NRC TEMPORARY INSTRUCTION 2515/183  
INSPECTION REPORT 05000335/2011009, 05000389/2011009

Distribution w/encl:

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U. S. NUCLEAR REGULATORY COMMISSION

REGION II

Docket Nos.: 50-335, 50-389

License Nos.: DPR-67, NPF-16

Report No.: 05000335/2011009, 05000389/2011009

Licensee: Florida Power & Light Company (FP&L)

Facility: St. Lucie Nuclear Plant, Units 1 & 2

Location: 6351 South Ocean Drive  
Jensen Beach, FL 34957

Dates: March 23 to April 29, 2011

Inspector: S. Sanchez, Acting Senior Resident Inspector

Approved by: D. Rich, Chief  
Reactor Projects Branch 3  
Division of Reactor Projects

Enclosure

## **SUMMARY OF FINDINGS**

IR 05000335/2011009, 05000389/2011009, 03/23/2011 – 04/29/2011; St. Lucie Temporary Instruction 2515/183 – Follow-up to the Fukushima Daiichi Nuclear Station Fuel Damage Event

This report covers an announced Temporary Instruction (TI) inspection. The inspection was conducted by a resident inspector. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006."

## **INSPECTION SCOPE**

The intent of the TI is to provide a broad overview of the industry's preparedness for events that may exceed the current design basis for a plant. The focus of the TI was on (1) assessing the licensee's capability to mitigate consequences from large fires or explosions on site, (2) assessing the licensee's capability to mitigate station blackout (SBO) conditions, (3) assessing the licensee's capability to mitigate internal and external flooding events accounted for by the station's design, and (4) assessing the thoroughness of the licensee's walk downs and inspections of important equipment needed to mitigate fire and flood events to identify the potential that the equipment's function could be lost during seismic events possible for the site. If necessary, a more specific follow-up inspection will be performed at a later date.

## **INSPECTION RESULTS**

All of the potential issues and observations identified by this inspection are contained in this report. The NRC's Reactor Oversight Process will further evaluate any issues to determine if they are regulatory findings or violations. Any resulting findings or violations will be documented by the NRC in a separate report.

Enclosure

03.01 Assess the licensee's capability to mitigate conditions that result from beyond design basis events, typically bounded by security threats, committed to as part of NRC Security Order Section B.5.b issued February 25, 2002, and severe accident management guidelines and as required by Title 10 of the Code of Federal Regulations (10 CFR) 50.54(hh). Use Inspection Procedure (IP) 71111.05T, "Fire Protection (Triennial)," Section 02.03 and 03.03 as a guideline. If IP 71111.05T was recently performed at the facility the inspector should review the inspection results and findings to identify any other potential areas of inspection. Particular emphasis should be placed on strategies related to the spent fuel pool. The inspection should include, but not be limited to, an assessment of any licensee actions to:

Licensee Action	Describe what the licensee did to test or inspect equipment.
<p>a. Verify through test or inspection that equipment is available and functional. Active equipment shall be tested and passive equipment shall be walked down and inspected. It is not expected that permanently installed equipment that is tested under an existing regulatory testing program be retested.</p> <p>This review should be done for a reasonable sample of mitigating strategies/equipment.</p>	<p>The licensee determined that the B.5.b. portable diesel fire pump (PDFP) and associated equipment were the only plant components required to be tested or inspected. The PDFP, fire hoses, and all necessary fittings were inspected by the licensee. The PDFP was tested at full flow, and all the necessary fittings, fire hoses, etc., were deployed in walk-through demonstrations of three key B.5.b. scenarios: PDFP steam generator feed; PDFP spent fuel pool (SFP) makeup; and PDFP containment flooding. The key non-plant equipment credited in B.5.b. response is offsite support from the St. Lucie County Fire Department. As a demonstration, or test, of that capability, a fire department ladder truck was brought onsite and SFP makeup spray capability was demonstrated in the plant's north parking lot.</p>
	<p>Describe inspector actions taken to confirm equipment readiness (e.g., observed a test, reviewed test results, discussed actions, reviewed records, etc.).</p>
	<p>The licensee's actions as discussed above were completed prior to the issuance of NRC TI 2515/183. The inspector assessed the licensee's capabilities by conducting a review of the licensee's walkdown activities. In addition, the inspector independently walked down and inspected all major B.5.b contingency response equipment staged throughout the site. The results of the inspector's independent walkdowns confirmed the results obtained by the licensee.</p>
	<p>Discuss general results including corrective actions by licensee.</p>



	<p>No significant deficiencies were identified in any of the three key B.5.b. scenarios. The licensee identified that spare parts for the PDFP are not maintained as part of the station's inventory. A condition report was written documenting this issue (AR 1630331) and entered into the licensee's Corrective Action program (CAP). The licensee also identified several minor enhancements to procedures, equipment, and labeling that were also entered in their CAP.</p>
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Licensee Action	Describe the licensee's actions to verify that procedures are in place and can be executed (e.g. walkdowns, demonstrations, tests, etc.)
<p>b. Verify through walkdowns or demonstration that procedures to implement the strategies associated with B.5.b and 10 CFR 50.54(hh) are in place and are executable. Licensees may choose not to connect or operate permanently installed equipment during this verification.</p> <p>This review should be done for a reasonable sample of mitigating strategies/equipment.</p>	<p>The licensee determined that the following plant procedures were relevant to verify the subject strategies: the B.5.b PDFP procedures; the SFP makeup procedures; the Severe Accident Mitigation Guidelines (SAMGs); the auxiliary feedwater (AFW) abnormal operating procedures (AOPs); and the Extensive Damage Mitigation Guidelines (EDMGs). These procedures were validated by walkdown, demonstration, or table top exercises as appropriate.</p>
	<p>Describe inspector actions and the sample strategies reviewed. Assess whether procedures were in place and could be used as intended.</p>
	<p>The licensee's actions as discussed above were completed prior to the issuance of NRC TI 2515/183. The inspector assessed the licensee's capabilities by conducting a review of the licensee's walkdown activities. In addition, the inspector selected several sections of a sample of the procedures walked down by the licensee and independently walked those down to verify the licensee's conclusions.</p>
	<p>Discuss general results including corrective actions by licensee.</p>
	<p>No significant deficiencies were identified in any of the procedures verified. The above listed procedures were reviewed by the licensee and walkdowns were performed by operators to ensure actions taken in the field in response to a B.5.b event could be performed. Some minor procedural enhancements were identified by the licensee and entered into their CAP. The inspector identified an enhancement to quality-related procedure 0-OSP-100.21, Portable Diesel Fire Pump Operability Test, to determine</p>

	appropriate flow rate acceptance criteria during the functional flow test of the pump. The licensee documented this enhancement in their CAP (AR 1647746).
Licensee Action	Describe the licensee's actions and conclusions regarding training and qualifications of operators and support staff.
c. Verify the training and qualifications of operators and the support staff needed to implement the procedures and work instructions are current for activities related to Security Order Section B.5.b and severe accident management guidelines as required by 10 CFR 50.54 (hh).	The licensee determined that B.5.b. and SAMG qualifications of operators (licensed and non-licensed) and Technical Support Center personnel required verification. Those qualifications were verified through review of qualification lists. In addition, an independent review of training records was performed by Training Department personnel.
	Describe inspector actions and the sample strategies reviewed to assess training and qualifications of operators and support staff
	The licensee's actions as discussed above were completed prior to the issuance of NRC TI 2515/183. The inspector assessed the licensee's training and qualification activities by conducting a review of training and qualification materials and records related to B.5.b and SAMG event response.
	Discuss general results including corrective actions by licensee.
	No significant personnel qualification issues were identified.

Licensee Action	Describe the licensee's actions and conclusions regarding applicable agreements and contracts are in place.
<p>d. Verify that any applicable agreements and contracts are in place and are capable of meeting the conditions needed to mitigate the consequences of these events.</p> <p>This review should be done for a reasonable sample of mitigating strategies/equipment.</p>	<p>The licensee determined that per the St. Lucie Emergency Plan, Letters of Agreement (LOA) are updated every third year and confirmed annually by direct contact, telephone, or correspondence with offsite agencies. All Letters of Agreement associated with the Emergency Plan were reviewed and verified to be current and in place, including all offsite agencies. The various involved agencies have listed in the Letters of Agreement specific measures they will take to assist the utility.</p>
	<p>For a sample of mitigating strategies involving contracts or agreements with offsite entities, describe inspector actions to confirm agreements and contracts are in place and current (e.g., confirm that offsite fire assistance agreement is in place and current).</p>
	<p>The licensee's actions as discussed above were completed prior to the issuance of NRC TI 2515/183. The inspector assessed the licensee's capabilities by conducting an independent review of the licensee's emergency response agreement with the various agencies with Letters of Agreement. The inspector's review of the agreements verified that they were current, and assessed whether or not they were adequate for meeting the licensee's mitigation strategy.</p>
	<p>Discuss general results including corrective actions by licensee.</p> <p>No significant deficiencies were identified in the review of offsite agency agreements and vendor contracts. A few minor items were identified by the licensee that necessitated further action: update LOA to ensure newly purchased equipment is added to existing list for St. Lucie County Fire District; track completion of the corporate contract with Aggreko since it was in the middle of negotiations when this review occurred; and, add annual verification to a site procedure for any Fleet Service contracts that may support emergency response. Each of these items was entered into the licensee's CAP.</p>

Licensee Action	Document the corrective action report number and briefly summarize problems noted by the licensee that have significant potential to prevent the success of any existing mitigating strategy.
<p>e. Review any open corrective action documents to assess problems with mitigating strategy implementation identified by the licensee. Assess the impact of the problem on the mitigating capability and the remaining capability that is not impacted.</p>	<p>The licensee identified many items for entry into their CAP, but none that had significant potential to prevent the success of any existing mitigation strategy. The following entries were reviewed by the inspector as responses to issues identified in section 03.01:</p> <ul style="list-style-type: none"> <li>• AR 1630331, No Spare Parts Available for B.5.b. Diesel Pump</li> <li>• AR 1631154, Written in Response to IER 11-1</li> <li>• AR 1631167, Letters of Agreement</li> <li>• AR 1631169, Letter of Agreement Improvement Opportunity</li> <li>• AR 1631172, Hurricane Season Checklist</li> <li>• AR 1631251, TSC Problem Solving Team Table Top Exercises</li> <li>• AR 1631388, Marking of Roadway for B.5.b. Pump</li> <li>• AR 1631449, Repair Gaitronics in Alternate Fire House</li> <li>• AR 1631454, Walkdown for IER 11-1</li> <li>• AR 1631033, AOP-04.01 Walkdown</li> <li>• AR 1647746, B.5.b. Pump Flow Test Acceptance Criteria [NRC IDENTIFIED]</li> </ul> <p>The inspector reviewed each AR for potential impact to the licensee's mitigation strategies. No significant impacts were identified.</p>

03.02 Assess the licensee's capability to mitigate station blackout (SBO) conditions, as required by 10 CFR 50.63, "Loss of All Alternating Current Power," and station design, is functional and valid. Refer to TI 2515/120, "Inspection of Implementation of Station Blackout Rule Multi-Plant Action Item A-22" as a guideline. It is not intended that TI 2515/120 be completely reinspected. The inspection should include, but not be limited to, an assessment of any licensee actions to:

Licensee Action	Describe the licensee's actions to verify the adequacy of equipment needed to mitigate an SBO event.
a. Verify through walkdowns and inspection that all required materials are adequate and properly staged, tested, and maintained.	<p>The licensee reviewed emergency operating procedures (EOP) 1/2-EOP-10, Station Blackout, and developed a list of every procedure that was referenced in those two EOPs. All EOPs at St. Lucie use 1/2-EOP-99, Appendices, Figures, Tables and Data Sheets. All sections of 1/2-EOP-99 that were used in Instructions or Contingency Actions of 1/2-EOP-10 were included in the list. Each activity on the list was assembled in individual packages which included a standardized Procedure Validation Sheet developed for fleet wide use. Step 12 of both EOP-10 procedures instructed Operations to "Ensure adequate ventilation or supplemental cooling" for various rooms and included "Contact E/M (electrical maintenance) for portable generators and temporary fan hookup." Step 12 was also assembled into a package for E/M to demonstrate that supplemental cooling could be implemented. All field packages for both units were walked down and step 12 was performed by E/M. While staging all equipment, E/M did not violate any security or fire barriers. In addition, E/M set up the portable generators and fans behind the E/M Shop, to ensure the generators and fans operated properly. All Procedure Validation Sheets were collected and scanned into the computer and were attached to procedure change requests (PCRs).</p>
	Describe inspector actions to verify equipment is available and useable.
	<p>The inspector assessed the licensee's capability to mitigate SBO conditions by conducting a review of the licensee's walkdown activities. In addition, the inspector selected a sample of equipment utilized by or required for mitigation of a SBO and conducted independent walkdowns to verify that the equipment was properly aligned and staged.</p>
	Discuss general results including corrective actions by licensee.

	<p>The licensee determined that all tools and special equipment were available and that the procedures could be performed as written. There was one PCR that was initiated and completed to change the reference in 1/2-EOP-10 from 1/2-NOP-02.24, Boron Concentration Control, to 1/2-AOP-02.02, Emergency Boration. However, the Operations Department determined that EOP-10 could have been run successfully with the as-listed procedure anyway because of the availability of an approved operational aid and the training conducted for emergency boration.</p> <p>E/M collected the required Supplemental Cooling Equipment which was staged in the onsite tool room. The set up for this evolution was extensive but very thorough. The complete set up is not required for every situation and most likely would only be partially implemented as prioritized by the Operations Department. Job execution would normally take 16-20 man hours, however, this evolution required 17 additional man hours due to the lack of familiarity and staging issues. This was considered not to be a failure of the step, but does not fit into a time frame normally associated with optimal EOP execution.</p> <p>Enhancement comments were received on all procedures and documented on the Procedure Validation Sheets. PCRs have been initiated for each procedure and the numbers are listed in the CAP. There was one CAP document (AR 1634098) written to track completion of all issues associated with IER 11-1 recommendation 2. The Supplemental Cooling resolution or clarification of expectations will be tracked under AR 1632160.</p>
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Licensee Action	Describe the licensee's actions to verify the capability to mitigate an SBO event.
<p>b. Demonstrate through walkdowns that procedures for response to an SBO are executable.</p>	<p>Procedure 2-EOP-10 was run in the simulator and all associated Appendices, Figures, Tables, and Data Sheets (2-EOP-99) required for use in the Control Room were validated. In addition to the simulator exercise, 1-EOP-10 and all associated Appendices, Figures, Tables, and Data Sheets (1-EOP-99) required for use in the Control Room were validated by walkdown.</p>
	<p>Describe inspector actions to assess whether procedures were in place and could be used as intended.</p>
	<p>The inspector assessed the licensee's capabilities by conducting a review of the licensee's walkdown activities. In addition, the inspector selected several sections of a sample of the procedures walked down by the licensee and independently walked those down to verify the licensee's conclusions. The inspector also observed a simulator training scenario that depicted a SBO event and subsequent operator actions to restore vital power from the other unit using the SBO crosstie breaker.</p>
	<p>Discuss general results including corrective actions by licensee.</p> <p>The licensee determined that all procedures could be performed as written. Minor procedural enhancements were identified by the licensee and documented as PCRs and will be updated at the next available opportunity.</p>

<p>03.03 Assess the licensee's capability to mitigate internal and external flooding events required by station design. Refer to IP 71111.01, "Adverse Weather Protection," Section 02.04, "Evaluate Readiness to Cope with External Flooding" as a guideline. The inspection should include, but not be limited to, an assessment of any licensee actions to verify through walkdowns and inspections that all required materials and equipment are adequate and properly staged. These walkdowns and inspections shall include verification that accessible doors, barriers, and penetration seals are functional.</p>	
Licensee Action	Describe the licensee's actions to verify the capability to mitigate existing design basis flooding events.
a. Verify through walkdowns and inspection that all required materials are adequate and properly staged, tested, and maintained.	The licensee reviewed the design basis, drawings, and procedures associated with flood protection materials and equipment. The licensee performed testing of active temporary equipment and inspected passive equipment to verify equipment was available and functional. In addition, the licensee verified that materials required to support flood mitigating actions were available and that temporary materials were properly staged.
	Describe inspector actions to verify equipment is available and useable. Assess whether procedures were in place and could be used as intended.
	The inspector assessed the licensee's capabilities to mitigate flooding by conducting a review of the licensee's walkdown activities. These reviews included the inspector conducting independent walkdowns of selected flood mitigation equipment and observing licensee engineering personnel during their in-field walkdowns. Licensee flood mitigation procedures were reviewed to verify usability. The inspector's conclusions aligned with the results obtained by the licensee.
	Discuss general results including corrective actions by licensee.
	No significant deficiencies were identified. The licensee did not identify any equipment functional failures. Doors, drains, barriers, and penetration seals were found to be functional. The licensee identified a total 22 penetration seals that were not inspected due to inaccessibility (e.g., high radiation area, scaffolding required) and documented the issue in the CAP (AR 1636698). Required materials, such as stop logs and portable sump pumps



	<p>were available and properly staged or stored. Based on these walkdowns and inspections, the barriers and equipment required to mitigate either an internal or external design basis flood event were in place. The licensee identified a potentially degraded flood barrier associated with the ultimate heat sink valve cubicles. The openings for the valve cubicles are below the design basis flood level, and are intended to be water tight to protect the safety-related valves and associated equipment located in the cubicles. Degraded concrete around the hatch has allowed water in-leakage. Although flooding of the ultimate heat sink valve would preclude the need to open the valve, the flood protection for the equipment is degraded from design. Licensee entered this item in their CAP as AR 1636642.</p>
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<p>03.04 Assess the thoroughness of the licensee's walkdowns and inspections of important equipment needed to mitigate fire and flood events to identify the potential that the equipment's function could be lost during seismic events possible for the site. Assess the licensee's development of any new mitigating strategies for identified vulnerabilities (e.g., entered it in to the corrective action program and any immediate actions taken). As a minimum, the licensee should have performed walkdowns and inspections of important equipment (permanent and temporary) such as storage tanks, plant water intake structures, and fire and flood response equipment; and developed mitigating strategies to cope with the loss of that important function. Use IP 71111.21, "Component Design Basis Inspection," Appendix 3, "Component Walkdown Considerations," as a guideline to assess the thoroughness of the licensee's walkdowns and inspections.</p>	
Licensee Action	Describe the licensee's actions to assess the potential impact of seismic events on the availability of equipment used in fire and flooding mitigation strategies.
<p>a. Verify through walkdowns that all required materials are adequate and properly staged, tested, and maintained.</p>	<p>The licensee performed the following actions:</p> <ul style="list-style-type: none"> <li>• Reviewed drawings and procedures to identify important permanent, portable, and temporary equipment used for mitigation of fires</li> <li>• Performed a walkdown of the identified fire mitigation equipment to assess the likelihood that it would survive a seismic event (the equipment was walked down even if it was not seismically designed in order to identify any degradation, non-conforming conditions, or external hazards that could make it more vulnerable to a seismic event)</li> <li>• Walked down flood protection features and equipment identified in Recommendation 3 to identify any seismic vulnerabilities, including storage and staging locations for flood protection equipment</li> <li>• Identified strategies in place for use of onsite portable equipment for firefighting</li> </ul>

	<p>contingencies</p> <ul style="list-style-type: none"> <li>• Verified through walkdowns or demonstration that procedures to implement the strategies are in place and are executable</li> <li>• Assessed equipment storage locations for seismic vulnerabilities</li> <li>• Identified strategies in place for use of external resources for firefighting contingencies</li> <li>• Verified that agreements are in place with the supporting agencies to support the actions required by the site procedures.</li> </ul>
	<p>Describe inspector actions to verify equipment is available and useable. Assess whether procedures were in place and could be used as intended.</p>
	<p>The inspectors conducted multiple walkdowns, both independently and in conjunction with licensee personnel, of important equipment needed to mitigate fire and flood events to identify the potential that the equipment's function could be lost during a seismic event. This equipment included, but was not limited to: all major B.5.b contingency response equipment staged throughout the site; all installed fire protection and suppression equipment in the various important-to-safety buildings onsite; the installed electric fire pumps and their controls; watertight doors and floor plugs throughout the site. Licensee flood and fire mitigation procedures were reviewed to verify usability. The results of the inspector's reviews aligned with the licensee's conclusions, as described below.</p>
	<p>Discuss general results including corrective actions by licensee. Briefly summarize any new mitigating strategies identified by the licensee as a result of their reviews.</p>
	<p>No significant deficiencies were identified with the licensee's assessment of important equipment needed to mitigate fire and flood events, to identify the potential that the equipment's function could be lost during seismic events possible for the site. The normal firefighting equipment is not designed for the site's design basis seismic event. Portable firefighting equipment used to support fire fighting strategies in the event that normal firefighting equipment is lost during a seismic event and some small portable flooding mitigation pumps could be damaged or become inaccessible due to non-seismic storage facilities. A plan for addressing the seismic issues identified above will be coordinated with the industry effort to identify plant enhancements to address the lessons learned from the events at Fukushima Daiichi Nuclear Station. The licensee generated AR 1640454 to revise Unit 1 and 2 firefighting strategies to address the loss of installed fire protection systems.</p>

Meetings.1 Exit Meeting

The inspectors presented the inspection results to Mr. R. Anderson and other members of licensee management on May 6, 2011. The inspectors asked the licensee whether any materials examined during the inspection should be considered proprietary. No proprietary information was identified.

ATTACHMENT: SUPPLEMENTAL INFORMATION

Enclosure

## **SUPPLEMENTAL INFORMATION**

### **KEY POINTS OF CONTACT**

#### **Licensee**

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M. Baughman, Training  
E. Belizar, Projects Manager  
E. Burgos, Chemistry Supervisor  
D. Calabrese, Emergency Preparedness Manager  
D. Cecchetti, Licensing Engineer  
J. Connor, Systems and Component Engineering Manager  
R. Filapek, Design Engineering Manager  
K. Frehafer, Licensing Engineer  
S. Gambill, Electrical Engineering Supervisor  
J. Hamm, Site Engineering Director  
M. Haskin, Maintenance Manager  
M. Hicks, Excellence Director  
T. Horton, Assistant Operations Manager  
D. Huey, Work Control Manager  
B. Hughes, Plant General Manager  
R. Lingle, Operations Manager  
C. Martin, Radiation Protection Manager  
R. McDaniel, Fire Protection Supervisor  
G. McKenzie, Lead Design Engineer  
M. Moore, Performance Improvement Department Manager  
B. Moss, BACCP Coordinator  
D. Nowakowski, ISI Planning  
J. Owens, Performance Improvement Department  
S. Ramani, Civil Engineering Supervisor  
O. Rodriguez, Systems Engineer  
M. Snyder, Site Quality Assurance Manager  
G. Swider, Engineering Manager - Programs  
D. West, Lead System Engineer  
T. Young, Security Manager

#### **Nuclear Regulatory Commission**

N. Childs, Resident Inspector  
S. Ninh, Senior Project Inspector

## **LIST OF DOCUMENTS REVIEWED**

### **03.01**

OSP-100.21 Portable Diesel Fire pump Operability Test  
AOP 04.01 Fuel Pool Cooling  
AOP 09.02 Auxiliary Feedwater  
SAMG 03J Phase 3 Major Loss of Plant Control Systems  
SAMG-01 Phase 1 Diagnostic  
SAMG-02 Phase 2 Verification of Diagnosis  
SAMG-03 (A-H) Phase 3 Candidate High Level Action  
SAMG-04, Restorative Accident Management Guidelines  
EDMG-01, Guideline for Responding to Large Area Fire or Explosion Involving Multiple Fire Zones  
EDMG-02, Major Loss of Plant Control Systems  
WO 40021026, Replace Fuel in B5b Portable Fire Pump  
Letter of Agreement between St. Lucie County Fire District and FPL

### **03.02**

EOP-10, Station Blackout  
EOP-99, Appendices, Figures, Tables, and Data Sheets  
NOP-02.24, Boron Concentration Control  
AOP-02.02, Emergency Boration  
NOP-14.02, Component Cooling Water System Operation  
NOP-21.03A, 1/2A Intake Cooling Water System Operation  
NOP-21.03B, 1/2B Intake Cooling Water System Operation  
NOP-21.03C, 1/2C Intake Cooling Water System Operation  
NOP-50.01A, 125V DC Bus 1/2A Normal Operation  
NOP-50.01B, 125V DC Bus 1/2B Normal Operation  
NOP-50.01AB, 125V DC Bus 1/2AB Normal Operation

### **03.03**

UFSAR, Section 3.4, Water Level (Flood) Design  
AOP-24.01, RAB Flooding

### **03.04**

AP-1-1800023, Unit 1 Fire Fighting Strategies  
AP-2-1800023, Unit 2 Fire Fighting Strategies